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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/812,880      | 03/21/2001  | Myron Eugene Taylor  | RGE 2001-1          | 1187             |

7590 06 02 2003

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[REDACTED] EXAMINER

FERNANDEZ, KALIMAH

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2881     |              |

DATE MAILED: 06/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                              |                      |
|------------------------------|------------------------------|----------------------|
| <b>Office Action Summary</b> | Application No.              | Applicant(s)         |
|                              | 09/812,880                   | TAYLOR, MYRON EUGENE |
|                              | Examiner<br>Kalmah Fernandez | Art Unit<br>2881     |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication
- If the period for reply specified above is less than thirty (30) days a reply within the statutory minimum of thirty (30) days will be considered timely
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 11 May 2001.

2a) This action is FINAL.                  2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-8 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No. 5,635,720 issued to Mooney et al and US Pat No. 3,887,827 issued to Katayama and in further view of US Pat No. 4,891,522 issued to Coon et al.

3. Mooney et al teaches a scintillator (22) for an electron microscope (col.2, lines 48-55).

4. Mooney et al teaches a disc shaped structure of optically clear material (e.g. glass optic fiber plate) (col. 4, lines 6-18).

5. Mooney et al teaches an indium tin oxide coating (40) (col.4, lines 55-62).

6. Mooney et al teaches an adhesive means (44) (col.5, lines 9-14).

7. Mooney et al teaches a scintillator material (22) is electrically connected to said outer surface on said indium tin oxide coating (40) via adhesive coating (44) (col.4, lines 55-67; see fig. 2).

8. Mooney et al does not teach an electrically conductive retaining ring and an extending lip.

9. However, Katayama teaches an electrically conductive retaining ring (22) having a radially inwardly extending lip on one end of said ring (see fig. 1; col.3, lines 20-37).

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10. It would have been obvious to an ordinary skilled artisan to combine the teachings of Mooney et al and Katayama, since Katayama teaches improved fabrication to protect from mechanical and thermal shock during fabrication (col.2, lines 40-47).

11. Neither Mooney et al nor Katayama teaches an electrically conductive adhesive means. However, Coon et al teaches the use of electrically conductive adhesive means in a particle detector (col.4, lines 50-68).

12. Coon et al teaches security of the chips (27) to the carrier by an electrically conductive attachment means (29) (col.4, lines 50-64).

13. It would have been obvious to an ordinary skilled artisan to combine the teachings of Coon et al into the obvious combination of Mooney et al and Katayama as set forth above since Coon et al teaches the ease of application of parts (col.4, lines 59-62).

14. As per claims 2-3, neither Mooney et al nor Coon et al explicitly teach a retaining ring made of solid gold, however Katayama does teach an electrically conductive ring. Therefore, any suitable conductive material can be used to carry out his invention whereas gold is a notoriously well-known electrical conductor used in the electrical industry. Further the limitation of the use of silver solder is indeed well-known in the art and relevant arts and Coon et al teaching of "conducting epoxy" for use as an electrically conductive attachment would obviously infer the use of silver solder (col.4, lines 65-68).

15. As per claim 4, the obvious combination of Mooney et al, Katayama, and Coon et al teaches said fabrication method.

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16. As per claim 5, neither Mooney et al nor Coon et al explicitly teach a retaining ring made of solid gold, however Katayama does teach an electrically conductive ring. Therefore, any suitable conductive material can be used to carry out his invention whereas gold-plated copper is a notoriously well-known electrical conductor used in the electrical industry (for example see col.3, lines 61-66 of Coon et al). In addition, Mooney et al teaches scintillator material is phosphors (col.1, lines 14-18; col.3, line 67-col.4, line 5).

17. As per claim 6, Katayama teaches a retaining ring which caps the face late and extends over the envelope (col.3, lines 20-24). Meaning that the retaining ring is of sufficient thickness as to obviate mechanical or thermal shock and further it would have been obvious to an ordinary artisan to select a thickness within the recited range since the ring thickness is a result-effective variable, which achieves an art-recognized result.

18. As per claims 7-8, Mooney et al teaches said scintillator material is planar and has a thickness ~5 to 50  $\mu\text{m}$  (col.3, lines 63-65;see fig.2).

### ***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US Pat No 5,932,880 issued to Koguchi et al, US Pat No. 3,919,582, US Pat No 4,940,919 issued Enck et al, US Pat No 6,414,309 issued to Mooney et al, US Pat No 5,990,483 issued to Shariv et al, US Pat No 5,866,907 issued

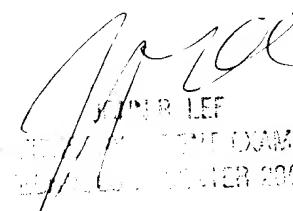
to Drukier et al, US Pat No 6,265,812 issued to Watanbe et al, and US Pat No 6,051,834 issued to Kakibayashi et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalimah Fernandez whose telephone number is 703-305-6310. The examiner can normally be reached on Mon-Thus between 8:30am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Lee can be reached on 703-308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

kf  
May 21, 2003

  
JOHN LEE  
SEARCHER/PATENT EXAMINER  
MAILED 5/21/2003